

### **PALM INTRANET**

Day: Tuesday Date: 4/12/2005

Time: 12:18:48

### **Inventor Name Search**

Enter the first few letters of the Inventor's Last Name. Additionally, enter the first few letters of the Inventor's First name.

Last Name	First Name	
Fuller	James	Search

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### Refine Search

### Search Results -

Term	
VACCINE	47853
VACCINES	37266
IMMUNE	142319
IMMUNES	. 35
RESPONSE	1861332
RESPONSES	165536
(10 AND (VACCINE OR (IMMUNE ADJ RESPONSE))).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	303
(L10 AND (VACCINE OR (IMMUNE ADJ RESPONSE)) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	303

US Pre-Grant Publication Full-Text Database US Patents Full-Text Database

Database:

US OCR Full-Text Database **EPO Abstracts Database** JPO Abstracts Database **Derwent World Patents Index** 

IBM Technical Disclosure Bulletins

Search:

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Recall Text =

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Interrupt

### Search History

DATE: Tuesday, April 12, 2005 Printable Copy Create Case

<u>Set</u> **Hit** <u>Set</u> <u>Name</u> Query **Count** side by result set side

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP = AND

L11 L10 and (vaccine or (immune adj response))

303 <u>L11</u>

L8 and ((hepatitis adj B) or HIV) L10

315 L10

<u>L9</u>	L8 and ((pseudorabies adj virus) adj promoter)	0	<u>L9</u>
<u>L8</u>	L7 not L3	395	<u>L8</u>
<u>L7</u>	L2 and ((gene adj gun) or (particle adj mediated) or (needleless adj injection))	434	<u>L7</u>
<u>L6</u>	L3 not L4	123	<u>L6</u>
<u>L5</u>	L4 and (HIV or (hepatitis adj B))	29	<u>L5</u>
<u>L4</u>	L3 and ((gene adj gun) or (particle adj mediated) or (needleless adj injection))	39	<u>L4</u>
<u>L3</u>	L2 and (hCMV or sCMV or PRV)	162	<u>L3</u>
<u>L2</u>	((minimal or enhancerless) adj promoter)	1910	<u>L2</u>
<u>L1</u>	Fuller-James-T\$.in.	12	<u>L1</u>

### END OF SEARCH HISTORY

### Refine Search

### Search Results -

Term	Documents
GENE	287076
GENES	114179
GUN	224295
GUNS	47328
PARTICLE	832817
PARTICLES	1160856
MEDIATED	118507
MEDIATEDS	0
NEEDLELESS	2069
NEEDLELESSES	0
INJECTION	935436
(L3 AND ((GENE ADJ GUN) OR (PARTICLE ADJ MEDIATED) OR (NEEDLELESS ADJ INJECTION)) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	5

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Search History

DATE: Tuesday, April 12, 2005 Printable Copy Create Case

Recall Text 4

<u>Set</u> Query <u>Name</u> side by

Search:

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Interrupt

side  DB=PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND		S;	result set
<u>L4</u>	L3 and ((gene adj gun) or (particle adj mediated) or (needleless adj injection))	5	<u>L4</u>
<u>L3</u>	(pseudorabies adj virus) same (promoter)	133	<u>L3</u>
<u>L2</u>	((pseudorabies adj virus) adj promoter)	1	<u>L2</u>
<u>L1</u>	((pseudorabies adj virus) adj (early adj promoter))	0	<u>L1</u>

### END OF SEARCH HISTORY

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Welcome to DialogClassic Web(tm)
 Dialog level 05.01.00D
Last logoff: 06apr05 13:08:47
Logon file001 12apr05 12:19:46
          *** ANNOUNCEMENT ***
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***Beilstein Facts (File 390)
***Beilstein Reactions (File 391)
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***ToxFile (File 156)
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***CorpTech (559)
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                   ***
     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
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KWIC is set to 50.
HILIGHT set on as ' '
 * * *
      1:ERIC 1966-2004/Jul 21
       (c) format only 2004 The Dialog Corporation
*File
        1: Updates suspended by ERIC until
Q2, 2005
      Set Items Description
Cost is in DialUnits
S 155, 159, 5, 73
     S1
          0 155, 159, 5, 73
?
S (MINIMAL OR ENHANCERLESS) (W) PROMOTER
           4450 MINIMAL
              0 ENHANCERLESS
              72 PROMOTER
     S2
              0 (MINIMAL OR ENHANCERLESS) (W) PROMOTER
?
S (TRUNCATED OR MINIMAL ) (W) PROMOTER
```

```
91 TRUNCATED
            4450 MINIMAL
              72 PROMOTER
      s3
               0 (TRUNCATED OR MINIMAL ) (W) PROMOTER
?
S TRUNCATED (W) CMV
             91 TRUNCATED
             751 CMV
               0 TRUNCATED (W) CMV
      S4
?
S (GENE (W) GUNE) OR (PARTICLE (W) MEDIATED) OR (NEEDLESS (W) INJECTION)
             462
                  GENE
               0 GUNE
               0 GENE (W) GUNE
             406 PARTICLE
            5559 MEDIATED
               0 PARTICLE (W) MEDIATED
              74 NEEDLESS
             134 INJECTION
               0 NEEDLESS (W) INJECTION
      S5
               O (GENE (W) GUNE) OR (PARTICLE (W) MEDIATED) OR (NEEDLESS
                  (W) INJECTION)
?
S (GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEEDLELESS (W) INJECTION)
             462 GENE
             369 GUN
               0 GENE (W) GUN
             406 PARTICLE
            5559 MEDIATED
               0 PARTICLE (W) MEDIATED
               0 NEEDLELESS
             134 INJECTION
               0 NEEDLELESS (W) INJECTION
      S6
               0 (GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEEDLELESS
                  (W) INJECTION)
?
S (GENETIC OR DNA) (W) VACCINATION
            1927 GENETIC
             488 DNA (ANY OF THE CLASS OF NUCLEIC ACIDS THAT CONTA...)
             173 VACCINATION
      s7
               0 (GENETIC OR DNA) (W) VACCINATION
?
B 155, 159, 5, 73
       12apr05 12:26:32 User259876 Session D740.1
            $3.43 0.981 DialUnits File1
     $3.43 Estimated cost File1
     $1.86 INTERNET
     $5.29 Estimated cost this search
     $5.29 Estimated total session cost 0.981 DialUnits
SYSTEM:OS - DIALOG OneSearch
  File 155:MEDLINE(R) 1951-2005/Apr W2
         (c) format only 2005 The Dialog Corp.
  File 159: Cancerlit 1975-2002/Oct
         (c) format only 2002 Dialog Corporation
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*File 159: Cancerlit is no longer updating.
Please see HELP NEWS159.
  File 5:Biosis Previews(R) 1969-2005/Apr W1
         (c) 2005 BIOSIS
  File 73:EMBASE 1974-2005/Apr W1
         (c) 2005 Elsevier Science B.V.
      Set Items Description
?
S (MINIMAL OR ENHANCERLESS) (W) PROMOTER?
          353773 MINIMAL
             355 ENHANCERLESS
          381217 PROMOTER?
      S1
            4169 (MINIMAL OR ENHANCERLESS) (W) PROMOTER?
?
S S1 AND (HCMV OR SCMV OR PRV)
            4169 S1
            8488 HCMV
             251 SCMV
            3525 PRV
      S2
              39 S1 AND (HCMV OR SCMV OR PRV)
?
RD
...completed examining records
             14 RD (unique items)
?
S S3 NOT PY>1998
              14 S3
         9843220 PY>1998
      S4
              9 S3 NOT PY>1998
T S4/3, K/ALL
  4/3, K/1
              (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2005 The Dialog Corp. All rts. reserv.
12223833
           PMID: 9524210
 Evaluation and mapping of the DNA binding and oligomerization domains of
 the IE2 regulatory protein of human cytomegalovirus using yeast one and two
 hybrid interaction assays.
  Ahn J H; Chiou C J; Hayward G S
      Molecular
                  Virology
                              Laboratories, Department of Pharmacology,
Molecular Sciences, Johns Hopkins University School of Medicine, 725 N.
Wolfe Street, WBSB 317, Baltimore, MD 21205, USA.
  Gene (NETHERLANDS)
                      Mar 27 1998, 210 (1) p25-36, ISSN 0378-1119
Journal Code: 7706761
  Contract/Grant No.: RO1 AI 24576; AI; NIAID
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: MEDLINE; Completed
```

The 86-kDa IE2 nuclear phosphoprotein encoded by the human cytomegalovirus ( HCMV ) major immediate-early (MIE) gene behaves as both a non-specific transactivator of viral and cellular gene expression and as a specific DNA-binding protein...

... of the protein, there is no direct evidence as yet that the intracellular mammalian forms of IE2 do so. Here, we show that the intact HCMV IE2 protein both binds to CRS DNA and dimerizes in yeast cells. In a one-hybrid assay system, a GAL4/IE2 fusion protein expressed in yeast cells activated target HIS3 expression only when CRS sites were located upstream of the GAL1 minimal promoter , but failed to do so on mutant CRS sites, demonstrating a requirement for sequence-specific DNA-binding by IE2. Examination of a series of deletion...

### 4/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

11976247 PMID: 9261391

Binding of SP1 to the immediate-early protein-responsive element of the human cytomegalovirus DNA polymerase promoter.

Luu P; Flores O

Tularik Inc., South San Francisco, California 94080, USA.

Journal of virology (UNITED STATES) Sep 1997, 71 (9) p6683-91,

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Human cytomegalovirus ( HCMV ), a member of the herpesvirus family of DNA viruses, encodes two major immediate-early (IE) transcription factors, IE72 and IE86, that are important for regulated expression of the viral genome. The purpose of this study was to identify the host cellular components required for regulation of the HCMV DNA polymerase promoter (UL54) by HCMV IE proteins. Extensive mutagenesis defined a DNA element located between -54 and -43 relative to the transcription start site that was required for both basal transcriptional activity and transactivation by viral IE proteins. A single copy of the UL54 -54/-43 sequence enhanced the responsiveness of a heterologous minimal promoter to HCMV IE proteins. Fractionation of extracts prepared from uninfected cells led to the isolation of two cellular proteins with apparent molecular masses of 95 and 105...

... GC box. We propose that SP1 is required to direct basal levels of promoter activity and that SP1-regulated transcription complexes allow the entry of **HCMV** IE proteins into the transcription cycle.

### 4/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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11658202 PMID: 8970984

Synergistic interactions between overlapping binding sites for the serum response factor and ELK-1 proteins mediate both basal enhancement and phorbol ester responsiveness of primate cytomegalovirus major immediate-early promoters in monocyte and T-lymphocyte cell types.

Chan Y J; Chiou C J; Huang Q; Hayward G S

Department of Pharmacology, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205, USA.

Journal of virology (UNITED STATES) Dec 1996, 70 (12) p8590-605, ISSN 0022-538X Journal Code: 0113724

Contract/Grant No.: 5T32 M07626; PHS; ROI-A124576; PHS; ROI-A131454; AI; NIAID

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

... MIE) and lytic cycle infectious progeny virus expression can be induced in otherwise nonpermissive monocyte-like U-937 cell cultures infected with either human CMV ( HCMV ) or simian CMV ( SCMV ) by treatment with the phorbol ester 12-0-tetradecanoylphorbol-13-acetate (TPA). Two multicopy basal enhancer motifs within the SCMV MIE enhancer, namely, 11 copies of the 16-bp cyclic AMP response element (CRE) and 3 copies of novel 17-bp serum response factor (SRF) binding sites referred to as the SNE (SRF/NFkappaB-like element), as well as four classical NFkappaB sites within the HCMV version, contribute to TPA responsiveness in transient assays in monocyte and T-cell types. The SCMV SNE sites contain potential overlapping core recognition binding motifs for SRF, Rel/NFkappaB, ETS, and YY1 class transcription factors but fail to respond to either...

...to evaluate the mechanism of TPA responsiveness of the SNE motifs and of a related 16-bp SEE (SRF/ETS element) motif found in the HCMV and chimpanzee CMV MIE enhancers, we have examined the functional responses and protein binding properties of multimerized wild-type and mutant elements added upstream to the **SCMV** MIE or simian virus 40 minimal promoter regions in the U-937, K-562, HL-60, THP-1, and Jurkat cell lines. Unlike classical NFkappaB sites, neither the SNE nor the SEE...

... Fos promoter serum response element, together with differences in the spacing between the SRF and ETS motifs, appear to account for the inability of the SCMV SNEs to respond to serum induction.

#### 4/3, K/4(Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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11453264 PMID: 8764042

Two distinct upstream regulatory domains containing multicopy cellular transcription factor binding sites provide basal repression and inducible enhancer characteristics to the immediate-early IES (US3) promoter from human cytomegalovirus.

Chan Y J; Tseng W P; Hayward G S

The Molecular Virology Laboratories, Department of Pharmacology, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205, USA.

Journal of virology (UNITED STATES) Aug 1996, 70 (8) p5312-28, ISSN 0022-538X Journal Code: 0113724

Contract/Grant No.: NIH 5T32-M07626; PHS; R01-AI31454; AI; NIAID

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The US3 gene of human cytomegalovirus ( HCMV ) is expressed at

immediate-early (IE) times in permissive HF cells, but not in nonpermissive rodent cells, and encodes several proteins that have been reported... ... unspliced forms of US3 IE transcripts are associated with the second of only two known large and complex upstream enhancer domains within the 229-kb HCMV genome, which we refer to as the IES cis-acting control region. Only the 260-bp proximal segment (from -313 to -55) of the 600...

... from -596 to -314) imparted up to 20-fold down-regulation effects onto strong basal heterologous promoters as well as onto the IES enhancer plus minimal promoter region in both U-937 and K-562 cells. Functional Nru repressor elements (NREs) could not be generated by multimerizing either the palindromic (P) Nru...

... either in concert with or separately from the major IE (MIE) enhancer-controlled IE1 and IE2 transactivator proteins, may play a critical role in determining **HCMV** permissiveness in some cell types and perhaps also in the establishment of or reactivation from latency.

#### 4/3,K/5 (Item 5 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

10732070 PMID: 7937760

Temporal control of gene expression in transgenic mice by a tetracycline-responsive promoter.

Furth P A; St Onge L; Boger H; Gruss P; Gossen M; Kistner A; Bujard H; Hennighausen L

Department of Molecular Cell Biology, Max Planck Institute for Biophysical Chemistry, Gottingen, Germany.

Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Sep 27 1994, 91 (20) p9302-6, ISSN 0027-8424 Journal Code: 7505876

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

... tetracycline-resistance operon (tet from Escherichia coli transposon Tn10) and the activating domain of viral protein VP16 of herpes simplex virus, induces transcription from a minimal promoter (PhCMV\*-1; see below) fused to seven tet operator sequences in the absence of tetracycline but not in its presence. Transgenic mice were generated that... ... under the control of PhCMV\*-1 or a transgene containing the tTA coding sequence under the control of the human cytomegalovirus immediate early gene 1 (hCMV IE1) promoter/enhancer. Whereas little luciferase or beta-galactosidase activity was observed in tissues of mice carrying only the reporter genes, the presence of tTA...

### 4/3,K/6 (Item 6 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

10114727 PMID: 8384027

Only the HLA class I gene minimal promoter elements are required for transactivation by human cytomegalovirus immediate early genes.

Burns L J; Waring J F; Reuter J J; Stinski M F; Ginder G D

Department of Medicine, University of Minnesota, Minneapolis.

Blood (UNITED STATES) Mar 15 1993, 81 (6) p1558-66, ISSN 0006-4971

Journal Code: 7603509

Contract/Grant No.: AI13562; AI; NIAID; CA45634; CA; NCI

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Only the HLA class I gene minimal promoter elements are required for transactivation by human cytomegalovirus immediate early genes.

The immediate early (IE) genes of human cytomegalovirus ( HCMV ) are expressed in lymphocytes and are known to transactivate both viral and cellular promoters. The mechanism by which IE gene products of HCMV transactivate expression of the HLA A2 gene promoter in Jurkat cells, a T-lymphocyte cell line, was investigated. Transient expression assays were performed using plasmids...

#### 4/3,K/7 (Item 7 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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09664498 PMID: 1310765

A 10-base-pair element of the human immunodeficiency virus type 1 long terminal repeat (LTR) is an absolute requirement for transactivation by the human cytomegalovirus 72-kilodalton IE1 protein but can be compensated for by other LTR regions in transactivation by the 80-kilodalton IE2 protein.

Walker S; Hagemeier C; Sissons J G; Sinclair J H

Department of Medicine, University of Cambridge, United Kingdom. Journal of virology (UNITED STATES) Mar 1992, 66 (3) p1543-50,

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Transient expression studies have indicated gene that cytomegalovirus ( HCMV ) specifically transactivates the human immunodeficiency virus (HIV) long terminal repeat (LTR). We show here, by a specific mutational analysis, that only the TATA box region is obligatory for transactivation of the HIV-1 LTR by HCMV . Similarly, this element is also sufficient for transactivation by either the HCMV 72-kDa major immediate-early 1 (IE1) or 80-kDa IE2 gene product independently. However, deletion of a 10-bp region from the minimal responsive element, 5' to the TATA box, dramatically reduced the level of HCMV 72-kDa IE1 or 80-kDa IE2 transactivation, indicating a crucial role for this element in transactivation. Whereas inclusion of the TAR element or Sp1 sites on this promoter had no effect on the removal of IE1 10-bp-deleted minimal transactivation, TAR and Sp1 elements did compensate for the 10-bp element transactivation by IE2 and  ${f HCMV}$  . Consequently, the sequence requirements of the HIV-1 LTR for transactivation by HCMV can be reproduced by these IE1 and IE2 gene products of HCMV

### 4/3,K/8 (Item 8 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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08610563 PMID: 2542610

The promoter-regulatory region of the major immediate-early gene of human cytomegalovirus responds to T-lymphocyte stimulation and contains functional cyclic AMP-response elements.

Hunninghake G W; Monick M M; Liu B; Stinski M F

Department of Medicine, University of Iowa College of Medicine, Iowa City

Journal of virology (UNITED STATES) Jul 1989, 63 (7) p3026-33,

ISSN 0022-538X Journal Code: 0113724

Contract/Grant No.: AI-13562; AI; NIAID; HL37120; HL; NHLBI

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Prior studies have demonstrated that a small proportion of blood lymphocytes from patients with human cytomegalovirus ( HCMV ) infection express only the viral immediate-early (IE) genes (L. Einhorn and A. Ost, J. Infect. Dis. 149:207-214, 1984; G. P. A. Rice...

... D. Schrier, and M. B. A. Oldstone, Proc. Natl. Acad. Sci. USA 81:6134-6138, 1984). The present studies demonstrate that the IE genes of are transcribed in Jurkat cells (T lymphocytes) only after activation of the cells with mitogens. Transcription of the IE genes is from an upstream enhancer...

... 19-bp repeat contains a sequence identical to that described for a cyclic AMP (cAMP) response element, and plasmids containing only this sequence and the minimal promoter sequences upstream of the CAT gene respond to agents which increase intracellular cAMP. Functional cAMP response elements are present in the wild-type promoter-regulatory region and are associated with the 19-bp repeat sequences. It is proposed that activation of lymphocytes results in expression of the IE genes of HCMV in part via the activation of cellular trans-acting factors which interact with the 18- and 19-bp motifs in the HCMV IE promoter-regulatory region. The 19-bp repeat is the major contributor to the strength of this enhancer-containing promoter-regulatory region.

#### 4/3, K/9(Item 1 from file: 159)

DIALOG(R) File 159: Cancerlit

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02449154 98307961 PMID: 9642285

The human interferon-inducible protein, IFI 16, is a repressor of transcription.

Johnstone R W; Kerry J A; Trapani J A

The Austin Research Institute, Austin Hospital, Studley Road, Heidelberg 3084, Victoria, Australia. r.johnstone@ari.unimelb.edu.au

J Biol Chem (UNITED STATES) Jul 3 1998, 273 (27) p17172-7, ISSN 0021-9258 Journal Code: 2985121R

Document Type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

...common to all human and mouse family members. We also demonstrate that wild type IFI 16 can repress transcription of a reporter gene containing the **minimal** promoter region of the human cytomegalovirus UL54 gene. Thus, IFI 16 is a transcriptional repressor, with a modular structure

```
typical of many known transcription regulators.
  Chemical Name: DNA Primers; DNA-Binding Proteins; HCMV DNA polymerase
catalytic subunit; Proteins; Repressor Proteins; IFI 16 protein; DNA;
Chloramphenicol O-Acetyltransferase; DNA-Directed DNA Polymerase
Set
        Items
                Description
               (MINIMAL OR ENHANCERLESS) (W) PROMOTER?
S1
         4169
S2
           39
                S1 AND (HCMV OR SCMV OR PRV)
           14
S3
                RD (unique items)
S4
            9
                S3 NOT PY>1998
?
S (GENETIC OR DNA) (W) VACCINATION
         1722707 GENETIC
         2689598 DNA
          165214 VACCINATION
            3234 (GENETIC OR DNA) (W) VACCINATION
S S5 AND ((GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEEDLELESS (W) INJECTION))
            3234 S5
         2648684 GENE
            9331 GUN
            1681 GENE (W) GUN
          173035 PARTICLE
         1185492 MEDIATED
             676 PARTICLE (W) MEDIATED
             556 NEEDLELESS
          760673 INJECTION
              70 NEEDLELESS (W) INJECTION
      S6
             351 S5 AND ((GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR
                  (NEEDLELESS (W) INJECTION))
?
S S6 AND ((HEPATITIS (W) B) OR HIV)
             351 S6
          357774 HEPATITIS
         2206645 B
          142241 HEPATITIS(W)B
          386025 HIV
              68 S6 AND ((HEPATITIS (W) B) OR HIV)
?
S S7 AND (CMV)
             68 S7
           39645 CMV
      S8
              5 S7 AND (CMV)
?
...completed examining records
          2 RD (unique items)
T S9/3, K/ALL
 9/3, K/1
              (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
```

(c) format only 2005 The Dialog Corp. All rts. reserv.

12806584 PMID: 10738089

Efficient vaccination by intradermal or intramuscular inoculation of plasmid DNA expressing hepatitis B surface antigen under desmin promoter/enhancer control.

Kwissa M; von Kampen v K; Zurbriggen R; Gluck R; Reimann J; Schirmbeck R Institute for Medical Microbiology, University of Ulm, Helmholtzstr. 8/1, D-89081, Ulm, Germany.

Vaccine (ENGLAND) May 8 2000, 18 (22) p2337-44, ISSN 0264-410X

Journal Code: 8406899
Publishing Model Print

Document type: Journal Article '

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Efficient vaccination by intradermal or intramuscular inoculation of plasmid DNA expressing hepatitis B surface antigen under desmin promoter/enhancer control.

The small surface antigen of the **hepatitis B** virus (HB5Ag) was cloned into expression plasmid pCI under either a viral ( **CMV** ) promoter; enhancer sequence control (plasmid pCI/S), or a human desmin promoter/enhancer sequence control (plasmid pDes/S). Cells of different species and tissue origin...

... expressed readily detectable amounts of HBsAg, either intracellularly (precipitated from cell lysates), or as secreted products (detectable in ELISA). When these plasmids were used in **DNA vaccination**, both efficiently primed humoral and/or cellular immune responses to HBsAg after a single injection in Balb/c mice. Intramuscular injection of a high dose ...

...7) of comparable magnitude in all vaccinated mice. Intradermal injection of low doses of (particle-coated) DNA (1 microgm/mouse) of both plasmids with the **gene gun** primed Th2 serum antibody responses (IgGl/IgG2a ratio > 100) but no CTL responses. The data indicate that antigens can be efficiently expressed under viral or...

Descriptors: \*Hepatiti s B Surface Antigens--genetics--GE; \* Hepatitis B Vaccines--administration and dosage--AD; \*Vaccines, DNA--administration and dosage--AD; Animals; Cell Line; Desmin--genetics--GE; Enhancer Elements (Genetics); Hepatitis B Antibodies--biosynthesis--BI;

**Hepatitis** B Vaccines--genetics--GE; Humans; Injections, Intradermal; Injections, Intramuscular; Mice; Mice, Inbred BALB C; Plasmids--genetics --GE; Promoter Regions (Genetics); T-Lymphocytes, Cytotoxic--immunology--IM; Thl...

Chemical Name: Desmin; Hepatitis B Antibodies; Hepatitis B Surface Antigens; Hepatitis B Vaccines; Plasmids; Vaccines, DNA

9/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

11580768 PMID: 8892045

Induction of immunodeficiency virus-specific immune responses in rhesus monkeys following gene gund-mediated DNAD vaccination. Tuller D H; Murphey-Corb M; Clements J; Barnett S; Haynes J R

Auragen, Inc., Middleton, WI, USA.

Journal of medical primatology (DENMARK) Jun 1996, 25 (3) p236-41,

```
ISSN 0047-2565
                Journal Code: 0320626
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: MEDLINE; Completed
 Induction of immunodeficiency virus-specific immune responses in rhesus
 monkeys following gene
                         gun□-mediated □ DNA□ □ vaccination□.□
  The Accell gene delivery system ( gene gun ) was used to deliver gold
particles coated with HIV -1LAI and SIVmac239 expression constructs into
the epidermis of rhesus macaques, resulting in the elicitation of env- and
gag-specific humoral responses. One microgram of vector DNA per dose was
sufficient to induce immune responses in monkeys using SIVmac239 gp160 and
gp120 vectors driven by the CMV -intron A promoter. Several parameters,
including the identity of the vector, the length of the rest period between
immunizations, the number of immunizations, and the amount of DNA per
immunization, are all important in designing an optimal DNA immunization
                               gun -based DNA immunization using low
regimen. In addition, gene
efficiency expression vectors is an effective means of priming for the
induction of vigorous antibody responses in macaques following boosting...
  Descriptors: *AIDS Vaccines; *Antibodies, Viral--biosynthesis--BI; *Gene
Therapy--instrumentation--IS;
                                *Genes,
                                          Viral;
                                                   * HIV
                                                            Antibodies
--biosynthesis--BI; * HIV -1--immunology--IM; *SIV--immunology--IM; *Viral
Vaccines; Animals; Antibody Formation; Biolistics; Gene Therapy--methods
--MT; Genes, env; Genes, gag; Genes, pol; Genetic Vectors; HIV Core
Protein p24--biosynthesis--BI; HIV Core Protein p24--genetics--GE; HIV
       Protein p24--immunology--IM;
                                       HIV Envelope
                                                       Protein
--biosynthesis--BI;
                    HIV Envelope Protein gp120--genetics--GE;
Envelope
           Protein gp120--immunology--IM;
                                               HIV -1--genetics--GE;
Immunoglobulin G--biosynthesis--BI; Macaca mulatta; Plasmids; SIV--genetics
--GE; Viral Envelope Proteins--biosynthesis--BI; Viral Envelope Proteins
--genetics--GE; Viral Envelope...
  Chemical Name: AIDS Vaccines; Antibodies, Viral; Genetic Vectors; HIV
             HIV Core Protein p24; HIV Envelope Protein gp120;
Immunoglobulin G; Plasmids; Viral Envelope Proteins; Viral Vaccines
Set
       Items
               Description
S1
        4169
               (MINIMAL OR ENHANCERLESS) (W) PROMOTER?
S2
          39
               S1 AND (HCMV OR SCMV OR PRV)
S3
               RD (unique items)
S4
           9
               S3 NOT PY>1998
S_5
        3234
               (GENETIC OR DNA) (W) VACCINATION
S6
         351
               S5 AND ((GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEED-
            LELESS (W) INJECTION))
s7
          68
               S6 AND ((HEPATITIS (W) B) OR HIV)
SR
           5
               S7 AND (CMV)
S9
               RD (unique items)
?
SRD S7
              0 RD S7
    S10
```

Set Items Description
S1 4169 (MINIMAL OR ENHANCERLESS) (W) PROMOTER?
S2 39 S1 AND (HCMV OR SCMV OR PRV)

```
s3
           14
               RD (unique items)
s4
               S3 NOT PY>1998
           9
S5
         3234
                (GENETIC OR DNA) (W) VACCINATION
               S5 AND ((GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEED-
S6
          351
            LELESS (W) INJECTION))
s7
           68
              S6 AND ((HEPATITIS (W) B) OR HIV)
           5
               S7 AND (CMV)
58
           2 RD (unique items)
S9
S10
               RD S7
S S7 NOT PY>1998
              68 S7
         9843220 PY>1998
            13 S7 NOT PY>1998
?
RD
...completed examining records
    S12 6 RD (unique items)
T S12/3, K/ALL
 12/3,K/1
               (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2005 The Dialog Corp. All rts. reserv.
          PMID: 9728557
 Mucosal and systemic antibody responses to a C4/V3 construct following
      vaccination of rabbits via the Peyer's patch.
 Winchell J M; Routray S; Betts P W; Van Kruiningen H J; Silbart L K
 University of Connecticut, Department of Molecular and Cell Biology,
Storrs 06269-4039, USA.
 Journal of infectious diseases (UNITED STATES)
                                                      Sep 1998, 178 (3)
p850-3, ISSN 0022-1899
                          Journal Code: 0413675
 Contract/Grant No.: AI-35351; AI; NIAID
 Publishing Model Print
 Document type: Journal Article
 Languages: ENGLISH
 Main Citation Owner: NLM
 Record type: MEDLINE; Completed
```

Mucosal and systemic antibody responses to a C4/V3 construct following DNA vaccination of rabbits via the Peyer's patch.

... A), a peptide derived from immunodominant regions of human immunodeficiency virus type 1 gp120, was delivered to rabbit Peyer's patches using a helium-driven **gene gun** . Six weeks thereafter, 2 of 5 animals were given an intradermal booster immunization. Blood, feces, and vaginal washes were collected weekly and assayed by ELISA...

... week 20 in the 2 animals receiving dermal boosts (titers > or = 6400). This study establishes the Peyer's patch as a promising target tissue for **DNA vaccination** and demonstrates the efficacy of **gene gun** -mediated delivery of foreign DNA to a mucosal tissue for the induction of an immune response.

Descriptors: \*AIDS Vaccines--immunology--IM; \* HIV Antibodies--analysis --AN; \* HIV Envelope Protein gp120--immunology--IM; \*Vaccines, DNA --immunology--IM; AIDS Vaccines--administration and dosage--AD; AIDS Vaccines--genetics--GE; Animals; HIV Envelope Protein gp120--genetics--GE

; Humans; Immunity, Mucosal; Immunoglobulin A, Secretory--analysis--AN; Immunoglobulin G--blood--BL; Peyer's Patches; Rabbits; Vaccination; Vagina --immunology--IM

Chemical Name: AIDS Vaccines; **HIV** Antibodies; **HIV** Envelope Protein gp120; Immunoglobulin A, Secretory; Immunoglobulin G; Vaccines, DNA

12/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

12413241 PMID: 9725796

Comparisons of DNA-mediated immunization procedures directed against surface glycoproteins of human immunodeficiency virus type-1 and hepatitis B virus.

Fomsgaard A; Nielsen H V; Nielsen C; Johansson K; Machuca R; Bruun L; Hansen J; Buus S

Department of Virology, Statens Serum Institut, Copenhagen, Denmark.

APMIS - acta pathologica, microbiologica, et immunologica Scandinavica (
DENMARK) Jun 1998, 106 (6) p636-46, ISSN 0903-4641 Journal Code: 8803400

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Comparisons of DNA-mediated immunization procedures directed against surface glycoproteins of human immunodeficiency virus type-1 and hepatitis

DNA vaccination methods were compared to examine the in vivo expression of HIV -1 gp160 and beta-galactosidase, and the resulting immune response. Beta-galactosidase plasmid showed expression rates of 2-5% of muscle fibers with or without pretreatments using bupivacaine or cardiotoxin facilitators 1 or 5 days earlier, respectively. In contrast, HIV gp160 expression was lower in untreated or bupivacaine-treated muscles, but was improved by pretreatment with cardiotoxin. Equal expression of beta-galactosidase and HIV gp160 was obtained using gene delivery to the epidermis. Unlike the i.m. in situ expression of gp160, the anti- HIV antibody response did not improve after muscle pretreatments but depended on the vaccination intervals. Gene delivery of pMN160 also resulted in a slow and low titered antibody response. In contrast, a single i.m. injection of plasmid encoding another viral envelope, HBsAg, resulted in earlier seroconversion to high titers without the need for pretreatments or boostings. Intradermal inoculation by gun using 100-fold less DNA resulted in the same anti-HBsAq antibody profile only after boostings. In contrast to the differences in antibody responses, a...

... directly with the expression rate. It is suggested that the antibody response may depend primarily on the nature of the antigen expressed rather than the **DNA** vaccination method. It is proposed that gene injection be used without pretreatment in the case of DNA vaccination with plasmid encoding HIV MN gp160. Descriptors: \*AIDS Vaccines--immunology--IM; \* HIV -1--immunology--IM; \* Vaccines--immunology--IM; \* Hepatitis Hepatitis В \*Vaccines, DNA--immunology--IM; --immunology--IM; AIDS Vaccines --administration and dosage--AD; AIDS Vaccines--genetics--GE; Amino Acid Antibodies, Viral--biosynthesis--BI; Biolistics; Sequence; Animals; Cytotoxicity, Immunologic--immunology--IM; Hepatitis B Vaccines

--administration and dosage--AD; **Hepatitis B** Vaccines--genetics--GE; Immunization Schedule; Immunization, Secondary; Injections, Intramuscular; Mice; Mice, Inbred BALB C; Mice, Inbred C57BL; Molecular Sequence Data; T-Lymphocytes, Cytotoxic--immunology--IM...

Chemical Name: AIDS Vaccines; Antibodies, Viral; Hepatitis B Vaccines; Vaccines, DNA

12/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

12288735 PMID: 9600309

Improved humoral and cellular immune responses against the gp120 V3 loop of HIV -1 following genetic immunization with a chimeric DNA vaccine encoding the V3 inserted into the hepatitis BD surface antigen. Tomsgaard A; Nielsen H V; Bryder K; Nielsen C; Machuca R; Bruun L; Hansen J; Buus S

Department of Virology, Statens Serum Institut, Copenhagen, Denmark. Scandinavian journal of immunology (ENGLAND) Apr 1998, 47 (4) p289-95, ISSN 0300-9475 Journal Code: 0323767

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Improved humoral and cellular immune responses against the gp120 V3 loop of HIV -1 following genetic immunization with a chimeric DNA vaccine encoding the V3 inserted into the hepatitis B□ surface antigen.□ The gp120-derived V3 loop of HIV -1 is involved in co-receptor interaction, it guides cell tropism, and contains an epitope for antibody neutralization. Thus, HIV -1 V3 is an attractive vaccine candidate. The V3 of the MN strain (MN V3) contains both B- and T-cell epitopes, including a known...

... of V3 in DNA vaccines, a plasmid expressing MN V3 as a fusion protein with the highly immunogenic middle (pre-S2 + S) surface antigen of B virus (HBsAg) was constructed. Epidermal inoculation by gun was used for genetic immunization in a mouse model. Antibody and CTL responses to MN V3 and HBsAg were measured and compared with the immune responses obtained after vaccination with plasmids encoding the complete HIV -1 MN gp160 and HBsAg (pre-S2 + S), respectively. DNA vaccination with the HIV MN gp160 envelope plasmid induced a slow and low titred anti-MN V3 antibody response at 12 weeks post-inoculation (p.i.) and a late appearing (7 weeks), weak and variable CTL response. In contrast, DNA vaccination with the HBsAg-encoding plasmid induced a rapid and high titred anti-HBsAg antibody response and a uniform strong anti-HBs CTL response already 1 week p.i. in all mice. DNA with the chimeric MN V3/HBsAg plasmid elicited humoral responses against both viruses within 3-6 weeks which peaked at 6-12 weeks and remained...

... Thus, HBsAg acts as a 'genetic vaccine adjuvant' augmenting and accelerating the cellular and humoral immune response against the inserted MN V3 loop. Such chimeric HIV -HBsAg plasmid constructs may be useful in DNA immunizations as a 'carrier' of protein regions or minimal epitopes which are less exposed or poorly immunogenic.

Descriptors: \*AIDS Vaccines--immunology--IM; \* HIV Antibodies
--immunology--IM; \* HIV Envelope Protein gp120--immunology--IM; \*
Hepatitis B Antibodies--immunology--IM; \* Hepatitis B Surface

Antigens--immunology--IM; \*Peptide Fragments--immunology--IM; \*Protein Precursors--immunology--IM; \*T-Lymphocytes, Cytotoxic--immunology--IM; \*Vaccines, DNA--immunology--IM; Amino Acid Sequence; Animals; HIV Envelope Protein gp120--genetics--GE; Hepatitis B Surface Antigens --genetics--GE; Humans; Immunization; Mice; Mice, Inbred BALB C; Mice, Inbred C57BL; Molecular Sequence Data; Mutagenesis, Insertional; Peptide Fragments--genetics--GE; Protein Precursors...

Chemical Name: AIDS Vaccines; HIV Antibodies; HIV Envelope Protein gp120; HIV envelope protein gp120 (305-321); Hepatitis B Antibodies; Hepatitis B Surface Antigens; Peptide Fragments; Protein Precursors; Vaccines, DNA; presurface protein 2, hepatitis B surface antigen

### 12/3,K/4 (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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11953107 PMID: 9234536

# Vaccination with HIV -1 gp120 DNA induces immune responses that are boosted by a recombinant gp120 protein subunit.

Barnett S W; Rajasekar S; Legg H; Doe B; Fuller D H; Haynes J R; Walker C M; Steimer K S

Geniva Inc. Middleton, WI 53562, USA.

Vaccine (ENGLAND) Jun 1997, 15 (8) p869-73, ISSN 0264-410X

Journal Code: 8406899
Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

# Vaccination with HIV -1 gp120 DNA induces immune responses that are boosted by a recombinant gp120 protein subunit.

Small animals were immunized with plasmid DNA encoding HIV -1 envelope gp120 either intramuscularly by needle injection (mice and guinea pigs) or epidermally with the Accell gene gun (guinea pits). Subsequently, the animals were boosted with a recombinant gp120 protein subunit vaccine in an oil-in-water based adjuvant, MF59. Antibodies and cytotoxic T-lymphocyte (CTL) immune responses to the HIV envelope glycoprotein were observed in animals immunized with gp120 DNA derived from the HIV -1SF2 laboratory strain or from HIV -1 field isolates. Titers of ELISA antibodies and serum neutralizing antibodies against the HIV -1SF2 laboratory isolate were substantially increased in DNA-immunized animals following a single boost with recombinant gp120 protein subunit. This DNA prime/protein subunit boost immunization approach may be important for vaccination against infectious agents such as HIV for which it is difficult to raise strong antiviral humoral responses with DNA vaccination alone.

Vaccines--immunology--IM; Descriptors: \*AIDS \* HIV Antibodies --biosynthesis--BI; \* **HIV** Envelope Protein gp120--immunology--IM; \*Vaccines, DNA--immunology--IM...; AIDS Vaccines--genetics--GE; Acquired Immunodeficiency Syndrome--prevention and control--PC; Adjuvants, Immunologic; Animals; Biolistics; DNA, Viral--immunology--IM; Enzyme-Linked Assay; Immunosorbent Guinea Pigs; HIV Envelope Protein gp120 --administration and dosage--AD; HIV Envelope Protein gp120--genetics --GE; Injections, Intramuscular; Mice; Mice, Inbred BALB C; Plasmids Polysorbates--analysis--AN; --genetics--GE; Squalene--analysis--AN; Squalene--immunology--IM; Surface...

Chemical Name: AIDS Vaccines; Adjuvants, Immunologic; DNA, Viral; HIV Antibodies; HIV Envelope Protein gp120; MF59 oil emulsion; Plasmids; Polysorbates; Surface-Active Agents; Vaccines, DNA; Vaccines, Synthetic;

Squalene

```
12/3,K/5
              (Item 5 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2005 The Dialog Corp. All rts. reserv.
11580768
          PMID: 8892045
 Induction of immunodeficiency virus-specific immune responses in rhesus
monkeys following gene gund-mediated DNAD vaccinationd.
  Fuller D H; Murphey-Corb M; Clements J; Barnett S; Haynes J R
 Auragen, Inc., Middleton, WI, USA.
  Journal of medical primatology (DENMARK) Jun 1996, 25 (3) p236-41,
ISSN 0047-2565
                Journal Code: 0320626
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: MEDLINE; Completed
 Induction of immunodeficiency virus-specific immune responses in rhesus
 monkeys following gene gun - mediated | DNA | | vaccination | |
  The Accell gene delivery system ( gene
                                         gun ) was used to deliver gold
particles coated with HIV -1LAI and SIVmac239 expression constructs into
the epidermis of rhesus macaques, resulting in the elicitation of env- and
gag-specific humoral responses. One microgram of...
... between immunizations, the number of immunizations, and the amount of
DNA per immunization, are all important in designing an optimal DNA
immunization regimen. In addition, gene gun -based DNA immunization
using low efficiency expression vectors is an effective means of priming
for the induction of vigorous antibody responses in macaques following
boosting...
  Descriptors: *AIDS Vaccines; *Antibodies, Viral--biosynthesis--BI; *Gene
Therapy--instrumentation--IS; *Genes,
                                         Viral;
                                                 * HIV Antibodies
--biosynthesis--BI; * HIV -1--immunology--IM; *SIV--immunology--IM; *Viral
Vaccines; Animals; Antibody Formation; Biolistics; Gene Therapy--methods
--MT; Genes, env; Genes, gag; Genes, pol; Genetic Vectors; HIV Core
Protein p24--biosynthesis--BI; HIV Core Protein p24--genetics--GE; HIV
Core Protein p24--immunology--IM;
                                     HIV Envelope
                                                       Protein
--biosynthesis--BI; HIV Envelope Protein gp120--genetics--GE;
           Protein
                      gp120--immunology--IM; HIV -1--genetics--GE;
Immunoglobulin G--biosynthesis--BI; Macaca mulatta; Plasmids; SIV--genetics
--GE; Viral Envelope Proteins--biosynthesis--BI; Viral Envelope Proteins
--genetics--GE; Viral Envelope...
  Chemical Name: AIDS Vaccines; Antibodies, Viral; Genetic Vectors; HIV
Antibodies; HIV Core Protein p24; HIV Envelope Protein gp120;
Immunoglobulin G; Plasmids; Viral Envelope Proteins; Viral Vaccines
 12/3,K/6
              (Item 1 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.
```

Improved humoral and cellular immune responses against the gp120 V3 loop of

HIV -1 following genetic immunization with a chimeric DNA vaccine

AUTHOR: Fomsgaarda H V Nielsen (Reprint); Bryder K; Nielsen C; Machuca R;

encoding the V3 inserted into the hepatitis B surface antigen

https://www.dialogclassic.com/259876RB.HTML?

Bruun L; Hansen J; Buus S

BIOSIS NO.: 199800257620

0011463373

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AUTHOR ADDRESS: Dep. Virol., Statens Serum Inst., 5 Artillerivej DK-2300 Copenhagen S, Denmark**Denmark
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JOURNAL: Scandinavian Journal of Immunology 47 (4): p289-295 April, 1998

1998

MEDIUM: print ISSN: 0300-9475

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

Improved humoral and cellular immune responses against the gp120 V3 loop of HIV -1 following genetic immunization with a chimeric DNA vaccine encoding the V3 inserted into the hepatitis B surface antigen

ABSTRACT: The gp120-derived V3 loop of HIV -1 is involved in co-receptor interaction, it guides cell tropism, and contains an epitope for antibody neutralization. Thus, HIV -1 V3 is an attractive vaccine candidate. The V3 of the MN strain (MN V3) contains both B- and T-cell epitopes, including a known...

...of V3 in DNA vaccines, a plasmid expressing MN V3 as a fusion protein with the highly immunogenic middle (pre-S2+S) surface antigen of hepatitis B virus (HBsAg) was constructed. Epidermal inoculation by qun was used for genetic immunization in a mouse model. Antibody gene and CTL responses to MN V3 and HBsAg were measured and compared with the immune responses obtained after vaccination with plasmids encoding the complete HIV -1 MN gp160 and HBsAg (pre-S2+S), respectively. DNA vaccination with the HIV MN gp160 envelope plasmid induced a slow and low titred anti-MN V3 antibody response at 12 weeks post-inoculation (p.i.) and a late appearing (7 weeks), weak and variable CTL response. In contrast, DNA vaccination with the HBsAg-encoding plasmid induced a rapid and high titred anti-HBsAg antibody response and a uniform strong anti-HBs CTL response already 1 week p.i. in all mice. DNA with the chimeric MN V3/HBsAg plasmid elicited humoral responses against both viruses within 3-6 weeks which peaked at 6-12 weeks and remained...

...Thus, HBsAg acts as a 'genetic vaccine adjuvant' augmenting and accelerating the cellular and humoral immune response against the inserted MN V3 loop. Such chimeric HIV -HBsAg plasmid constructs may be useful in DNA immunizations as a 'carrier' of protein regions or minimal epitopes which are less exposed or poorly immunogenic.

DESCRIPTORS:

...ORGANISMS: **HIV** -1 {human immunodeficiency virus type 1} (Retroviridae CHEMICALS & BIOCHEMICALS: **hepatitis B** virus immunogenic middle surface antigen...

... HIV strain-MN gp160 (human immunodeficiency virus strain-MN glycoprotein 160...

... HIV -1 gp120-derived V3 loop {human immunodeficiency virus-1
 glycoprotein 120-derived V3 loop
?

Set Items Description 4169 s1(MINIMAL OR ENHANCERLESS) (W) PROMOTER? S2 39 S1 AND (HCMV OR SCMV OR PRV) S314 RD (unique items) S 4 9 S3 NOT PY>1998 (GENETIC OR DNA) (W) VACCINATION S.5 3234

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S5 AND ((GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEED-
S6
             LELESS (W) INJECTION))
S7
           68
                S6 AND ((HEPATITIS (W) B) OR HIV)
S8
                S7 AND (CMV)
S9
            2
                RD (unique items)
                RD S7
S10
            0
          13
                S7 NOT PY>1998
S11
                RD (unique items)
S12
            6
S S7 AND (CMV)
              68
                  s7
          39645 CMV
     S13
              5 S7 AND (CMV)
?
RD
...completed examining records
              2 RD (unique items)
T S14/3, K/ALL
  14/3, K/1
               (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2005 The Dialog Corp. All rts. reserv.
12806584
          PMID: 10738089
Efficient vaccination by intradermal or intramuscular inoculation of
plasmid DNA expressing hepatitis
                                        B surface antigen under desmin
promoter/enhancer control.
 Kwissa M; von Kampen v K; Zurbriggen R; Gluck R; Reimann J; Schirmbeck R
  Institute for Medical Microbiology, University of Ulm, Helmholtzstr. 8/1,
D-89081, Ulm, Germany.
 Vaccine (ENGLAND)
                     May 8 2000, 18 (22) p2337-44, ISSN 0264-410X
Journal Code: 8406899
  Publishing Model Print
 Document type: Journal Article
 Languages: ENGLISH
 Main Citation Owner: NLM
 Record type: MEDLINE; Completed
Efficient vaccination by intradermal or intramuscular inoculation of
```

Efficient vaccination by intradermal or intramuscular inoculation of plasmid DNA expressing hepatitis B surface antigen under desmin promoter/enhancer control.

The small surface antigen of the **hepatitis B** virus (HB5Ag) was cloned into expression plasmid pCI under either a viral ( **CMV** ) promoter; enhancer sequence control (plasmid pCI/S), or a human desmin promoter/enhancer sequence control (plasmid pDes/S). Cells of different species and tissue origin...

... expressed readily detectable amounts of HBsAg, either intracellularly (precipitated from cell lysates), or as secreted products (detectable in ELISA). When these plasmids were used in **DNA vaccination**, both efficiently primed humoral and/or cellular immune responses to HBsAg after a single injection in Balb/c mice. Intramuscular injection of a high dose ...

...7) of comparable magnitude in all vaccinated mice. Intradermal injection of low doses of (particle-coated) DNA (1 microgm/mouse) of both plasmids

with the **gene gun** primed Th2 serum antibody responses (IgGl/IgG2a ratio > 100) but no CTL responses. The data indicate that antigens can be efficiently expressed under viral or...

Descriptors: \*Hepatiti s B Surface Antigens--genetics--GE; \* Thepatitis B Vaccines--administration and dosage--AD; \*Vaccines, DNA --administration and dosage--AD; Animals; Cell Line; Desmin--genetics--GE; Enhancer Elements (Genetics); Hepatitis B Antibodies--biosynthesis--BI; Hepatitis B Vaccines--genetics--GE; Humans; Injections, Intradermal; Injections, Intramuscular; Mice; Mice, Inbred BALB C; Plasmids--genetics--GE; Promoter Regions (Genetics); T-Lymphocytes, Cytotoxic--immunology--IM; Th1...

Chemical Name: Desmin; Hepatitis B Antibodies; Hepatitis B Surface Antigens; Hepatitis B Vaccines; Plasmids; Vaccines, DNA

#### 14/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

11580768 PMID: 8892045

Induction of immunodeficiency virus-specific immune responses in rhesus monkeys following gene gun $\square$ -mediated  $\square$  DNA $\square$   $\square$  vaccination $\square$ . $\square$ 

Fuller D H; Murphey-Corb M; Clements J; Barnett S; Haynes J R

Auragen, Inc., Middleton, WI, USA.

Journal of medical primatology (DENMARK) Jun 1996, 25 (3) p236-41, ISSN 0047-2565 Journal Code: 0320626

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

# Induction of immunodeficiency virus-specific immune responses in rhesus monkeys following gene gund-mediated DNAD vaccination.

The Accell gene delivery system ( gene gun ) was used to deliver gold particles coated with HIV -1LAI and SIVmac239 expression constructs into the epidermis of rhesus macaques, resulting in the elicitation of env- and gag-specific humoral responses. One microgram of vector DNA per dose was sufficient to induce immune responses in monkeys using SIVmac239 gp160 and gp120 vectors driven by the CMV -intron A promoter. Several parameters, including the identity of the vector, the length of the rest period between immunizations, the number of immunizations, and the amount of DNA per immunization, are all important in designing an optimal DNA immunization regimen. In addition, gene gun -based DNA immunization using low efficiency expression vectors is an effective means of priming for the induction of vigorous antibody responses in macaques following boosting...

Descriptors: \*AIDS Vaccines; \*Antibodies, Viral--biosynthesis--BI; \*Gene Therapy--instrumentation--IS; \*Genes, Viral; \* HIV Antibodies --biosynthesis--BI; \* HIV -1--immunology--IM; \*SIV--immunology--IM; \*Viral Vaccines; Animals; Antibody Formation; Biolistics; Gene Therapy--methods --MT; Genes, env; Genes, gag; Genes, pol; Genetic Vectors; HIV Core Protein p24--biosynthesis--BI; HIV Core Protein p24--genetics--GE; HIV Core Protein p24--immunology--IM; HIV Envelope Protein --biosynthesis--BI; HIV Envelope Protein gp120--genetics--GE; Envelope Protein gp120--immunology--IM; HIV -1--genetics--GE; Immunoglobulin G--biosynthesis--BI; Macaca mulatta; Plasmids; SIV--genetics --GE; Viral Envelope Proteins--biosynthesis--BI; Viral Envelope Proteins --genetics--GE; Viral Envelope...

Chemical Name: AIDS Vaccines; Antibodies, Viral; Genetic Vectors; HIV Antibodies; HIV Core Protein p24; HIV Envelope Protein gp120;

```
Set
        Items
                Description
S1
         4169
               (MINIMAL OR ENHANCERLESS) (W) PROMOTER?
S2
           39
                S1 AND (HCMV OR SCMV OR PRV)
S3
           14
                RD (unique items)
S4
            9
                S3 NOT PY>1998
                (GENETIC OR DNA) (W) VACCINATION
S5
         3234
S6
          351
                S5 AND ((GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEED-
             LELESS (W) INJECTION))
s7
           68
                S6 AND ((HEPATITIS (W) B) OR HIV)
            5
S8
                S7 AND (CMV)
S9
           2
                RD (unique items)
S10
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               RD S7
               S7 NOT PY>1998
S11
          13
S12
            6
               RD (unique items)
S13
            5
                S7 AND (CMV)
S14
           2
                RD (unique items)
?
S S5 AND (HEPATITIS (W) B)
            3234 S5
          357774
                 HEPATITIS
         2206645 B
          142241 HEPATITIS (W) B
     S15
            187 S5 AND (HEPATITIS (W) B)
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S S15 AND REVIEW
             187
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         1874191 REVIEW
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...completed examining records
          11 RD (unique items)
T S17/3, K/ALL
 17/3,K/1
               (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2005 The Dialog Corp. All rts. reserv.
13746126
          PMID: 11405219
Revealing the potential of DNA-based vaccination: lessons learned from
      hepatitis
                   B□ virus surface antigen.□
 Schirmbeck R; Reimann J
 Institute for Medical Microbiology and Immunology, University of Ulm,
Germany.
 Biological
              chemistry (Germany)
                                     Apr 2001, 382
                                                      (4)
                                                             p543-52,
1431-6730
          Journal Code: 9700112
 Publishing Model Print
 Document type: Journal Article; Review; Review, Tutorial
 Languages: ENGLISH
 Main Citation Owner: NLM
 Record type: MEDLINE; Completed
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Immunoglobulin G; Plasmids; Viral Envelope Proteins; Viral Vaccines

```
Revealing the potential of DNA-based vaccination: lessons learned from
 the hepatitis BO virus surface antigen.
  ... modifications from antigen-encoding expression plasmid DNA. This
ensures the integrity of antibody-defined epitopes and supports the
generation of protective (neutralizing) antibody titers. Plasmid DNA
  vaccination is furthermore an exceptionally potent strategy to stimulate
CD8+ cytotoxic T lymphocyte (CTL) responses because antigenic peptides are
efficiently generated by endogenous processing of intracellular protein
antigens. These key features make DNA-based immunization an attractive
strategy for prophylactic and therapeutic vaccination against extra- and
intracellular pathogens. In this brief {\bf review} , we summarize the current
state of expression vector design, DNA delivery strategies, priming immune
responses to intracellular or secreted antigens by DNA vaccines and unique
advantages of DNA- versus recombinant protein-based vaccines using the
  hepatitis B surface antigen (HBsAg) as a model antigen.
  Descriptors: *Gene Expression--immunology--IM; * Hepatitis
Antigens--immunology--IM; * Hepatitis B Vaccines--immunology--IM; *
                   B virus--immunology--IM; *Plasmids--immunology--IM;
  Hepatitis
*Vaccines, DNA--immunology--IM;
                                  Administration, Cutaneous; Animals;
CD8-Positive T-Lymphocytes--immunology--IM; Gene Expression--genetics--GE;
  Hepatitis B Vaccines--administration and dosage--AD; Hepatitis
 Vaccines--genetics--GE; Humans;
                                    Injections,
                                                 Intramuscular; Muscles
--immunology--IM; Plasmids--genetics--GE; Skin--immunology--IM; T-Lymphocyt
es, Cytotoxic--immunology--IM; Vaccines, DNA--administration and dosage...
  Chemical Name: Hepatitis B Surface Antigens; Hepatitis B Vaccines
; Plasmids; Vaccines, DNA
  17/3,K/2
               (Item 1 from file: 5)
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.
0014524288
            BIOSIS NO.: 200300478243
 [DNA vaccines.]
ORIGINAL LANGUAGE TITLE: Les vaccins a ADN.
AUTHOR: Prugnaud J-L (Reprint)
AUTHOR ADDRESS: Service de Pharmacie, Hopital Saint-Antoine (Assistance
  Publique-Hopitaux de Paris), 184, Rue du Faubourg Saint-Antoine, F75012,
  Paris, France**France
JOURNAL: Annales Pharmaceutiques Francaises 61 (4): p219-233 Juillet 2003
2003
MEDIUM: print
ISSN: 0003-4509
DOCUMENT TYPE: Article; Literature Review
RECORD TYPE: Abstract
LANGUAGE: French
ABSTRACT: DNA
              vaccination is a new vaccine approach used to induce an
  immune response to an antigen protein expressed in vivo. It is based on
  the introduction, via...
...for HIV, HBV, HVC, HSV, tuberculosis, and malaria. Clinical trials are
  also in hand for cancer and the treatment of allergies. This new approach
          vaccination offers new hope because of their low cost and
 manufacturing stability at ambient temperature.
DESCRIPTORS:
  ...ORGANISMS: HBV { Hepatitis B virus} (Hepadnaviridae...
 MISCELLANEOUS TERMS: ...Literature Review
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17/3,K/3
              (Item 2 from file: 5)
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.
            BIOSIS NO.: 200200433480
0013839969
New vaccination strategies for low- and non-responders to hepatitis
AUTHOR: Rendi-Wagner Pamela (Reprint); Wiedermann Gerhard; Stemberger
  Heinrich; Kollaritsch Herwig
AUTHOR ADDRESS: Department of Specific Prophylaxis and Tropical Medicine,
  Institute of Pathophysiology, University of Vienna, Kinderspitalgasse 15,
  A-1095, Vienna, Austria**Austria
JOURNAL: Wiener Klinische Wochenschrift 114 (5-6): p175-180 28 Maerz, 2002
 2002
MEDIUM: print
ISSN: 0043-5325
DOCUMENT TYPE: Article; Literature Review
RECORD TYPE: Abstract
LANGUAGE: English
New vaccination strategies for low- and non-responders to hepatitis
 vaccine
ABSTRACT: The currently available recombinant hepatitis
                                                         B vaccines are
  safe, efficacious and immunogenic. Nevertheless, a high rate of low- and
  nonresponsiveness to the current vaccine poses a problem since this group
  remains susceptible to infection with hepatitis
                                                  B virus. Efforts are
  underway to develop new vaccines and strategies to enhance seroprotection
  rates. One possibility under investigation is the low-dose intradermal
  administration of ...
...trials evaluating the immunogenicity of new recombinant vaccines
 containing the complete pre-S1 and pre-S2 regions of HbsAg and, more
  recently, of novel adjuvanted hepatitis B vaccines. Future approaches
  include DNA
              vaccination and expression of HbsAq determinants in live
  recombinant vectors.
DESCRIPTORS:
 ORGANISMS: hepatitis B virus (Hepadnaviridae...
               B vaccine low-responders, hepatitis
... hepatitis
                                                     B vaccine
   non-responders, patient
 METHODS & EQUIPMENT: hepatitis
                                  B vaccine...
 MISCELLANEOUS TERMS: ...Literature Review
 17/3,K/4
              (Item 1 from file: 73)
DIALOG(R) File 73: EMBASE
(c) 2005 Elsevier Science B.V. All rts. reserv.
11998955
            EMBASE No: 2003109925
 Particle-mediated DNA
                        vaccination of mice, monkeys and men: Looking
beyond the dogma
 Payne L.G.; Fuller D.H.; Haynes J.R.
 L.G. Payne, PowderJect Vaccines Inc., 585 Science Drive, Madison, WI
 53711 United States
 AUTHOR EMAIL: lendon payne@powderject.com
 Current Opinion in Molecular Therapeutics ( CURR. OPIN. MOL. THER. ) (
 United Kingdom) 2002, 4/5 (459-466)
 CODEN: CUOTF
               ISSN: 1464-8431
```

DOCUMENT TYPE: Journal ; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 60

### Particle-mediated DNA vaccination of mice, monkeys and men: Looking beyond the dogma

...that particle-mediated epidermal DNA immunization induced predominantly Th2-type cellular immune responses, and secondly that DNA immunization was not very successful in humans. This **review** highlights the current body of data showing that particle-mediated DNA immunization is highly effective in the induction Th1-type responses and is an efficient... DRUG DESCRIPTORS:

...dl; rabies vaccine--drug administration--ad; rabies vaccine--intradermal drug administration--dl; hepatitis A vaccine--drug administration--ad; hepatitis A vaccine--intramuscular drug administration--im; hepatitis B vaccine--drug administration--ad; hepatitis B vaccine--intramuscular drug administration--im; adjuvant--drug administration--ad; adjuvant--intramuscular drug administration--im; adjuvant--intranasal drug administration--na

MEDICAL DESCRIPTORS:

vaccination; monkey; Th2 cell; cellular immunity; data analysis; epidermis; Th1 cell; drug delivery system; gene gun; device; drug administration route; human; nonhuman; mouse; review

#### 17/3,K/5 (Item 2 from file: 73)

DIALOG(R) File 73: EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

11875934 EMBASE No: 2002446490

#### A role for liposomes in genetic vaccination

Gregoriadis G.; Bacon A.; Caparros-Wanderley W.; McCormack B. G. Gregoriadis, School of Pharmacy, 29-39 Brunswick Square, London WC1N 1AX United Kingdom

AUTHOR EMAIL: gregoriadis@ulsop.ac.uk

Vaccine ( VACCINE ) (United Kingdom) 20 DEC 2002, 20/SUPPL. 5 (B1-B9)

CODEN: VACCD ISSN: 0264-410X

PUBLISHER ITEM IDENTIFIER: S0264410X02005145

DOCUMENT TYPE: Journal ; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 30

#### A role for liposomes in genetic vaccination

...dried, ready to use preparation. Animal experiments have shown that immunization by the intramuscular or the subcutaneous route with liposome-entrapped plasmid DNA encoding the **hepatitis B** surface antigen leads to much greater humoral (IgG subclasses) and cell mediated (splenic IFN-gamma) immune responses than with naked DNA. In other experiments with

### DRUG DESCRIPTORS:

carrier protein; immunoglobulin G; hepatitis B surface antigen; gamma interferon; naked DNA; ovalbumin; nuclease; phosphatidylcholine; dioleoylphosphatidylethanolamine; octadecylamine; phosphatidylglycerol; phosphatidylserine; luciferase; human growth hormone; bacterial protein; green fluorescent protein; CD4 antigen--endogenous...
MEDICAL DESCRIPTORS:

...genetic code; cytotoxic T lymphocyte; inguinal lymph node; lymph node; lymphatic drainage; injection site; drug administration route; spleen;

tissue; B lymphocyte; human; nonhuman; clinical article; review ; priority journal 17/3,K/6 (Item 3 from file: 73) DIALOG(R) File 73: EMBASE (c) 2005 Elsevier Science B.V. All rts. reserv. 11867708 EMBASE No: 2002438078 A single dose of oral DNA immunization delivered by attenuated Salmonella typhimurium down-regulates transgene expression in HBsAg transgenic mice Zheng B.J.; Ng M.H.; Chan K.W.; Tam S.; Woo P.C.Y.; Ng S.P.; Yuen K.Y. K.Y. Yuen, Department of Microbiology, The University of Hong Kong, Pokfulam Road, Hong Kong Hong Kong AUTHOR EMAIL: kyyuen@khucc.hku.hk European Journal of Immunology (EUR. J. IMMUNOL. ) (Germany) 2002, 32/11 (3294-3304) CODEN: EJIMA ISSN: 0014-2980 DOCUMENT TYPE: Journal ; Review LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH NUMBER OF REFERENCES: 32 ...is orchestrated by phagocytic APC. Our present findings further implicated that the combined effects of an innate and a specific immune response induced by oral DNA vaccination are crucial in down-regulating HBsAg-transgene expression in hepatocytes. DRUG DESCRIPTORS: ...\*cm; \*DNA vaccine--drug dose--do; \*DNA vaccine--drug therapy--dt; \*DNA vaccine--pharmaceutics--pr; \*DNA vaccine--pharmacology--pd; \*DNA vaccine --oral drug administration--po; \* hepatitis B surface antigen--drug administration--ad; \* hepatitis B surface antigen--drug comparison--cm; \* hepatitis B surface antigen--drug dose--do; \* hepatitis B surface antigen--drug therapy--dt; \* hepatitis B surface antigen--pharmaceutics --pr; \* hepatitis B surface antigen--pharmacology--pd; \* hepatitis surface antigen--oral drug administration--po ...immunoglobulin G2--endogenous compound--ec; immunoglobulin subclass --endogenous compound--ec; alanine aminotransferase--endogenous compound --ec; messenger RNA--endogenous compound--ec; virus antigen--endogenous compound--ec; hepatitis **B** surface antibody MEDICAL DESCRIPTORS: B --drug therapy--dt; \* hepatitis B --prevention--pc; \* nonviral gene delivery system; \*Salmonella typhimurium ...immunological tolerance; immune response; histopathology; immunization; transgenic mouse; single drug dose; nonhuman; male; female; mouse; animal experiment; animal model; controlled study; animal tissue; animal cell; review ; priority journal 17/3,K/7 (Item 4 from file: 73) DIALOG(R) File 73: EMBASE (c) 2005 Elsevier Science B.V. All rts. reserv. 10932192 EMBASE No: 1998345292 DNA/ Genetic vaccination Kucerova L. L. Kucerova, Department of Molecular Virology, Cancer Research Institute, Slovak Academy of Sciences, Vlarska 7, 833 91 Bratislava Slovakia Viral Immunology (VIRAL IMMUNOL.) (United States) 1998, 11/2 (55-63)

CODEN: VIIME ISSN: 0882-8245 DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH NUMBER OF REFERENCES: 52 DNA/ Genetic vaccination DRUG DESCRIPTORS: cancer vaccine--pharmacology--pd; human immunodeficiency virus vaccine --pharmacology--pd; hepatitis b vaccine--pharmacology--pd; bacterial vaccine--pharmacology--pd MEDICAL DESCRIPTORS: cellular immunity; immune response; antigen expression; dna transfection; humoral immunity; immunity; antigen presentation; human; nonhuman; animal experiment; human cell; animal cell; review (Item 5 from file: 73) 17/3,K/8 DIALOG(R) File 73: EMBASE (c) 2005 Elsevier Science B.V. All rts. reserv. 10807188 EMBASE No: 2000288147 DNA vaccines Koide Y.; Nagata T.; Yoshida A.; Uchijima M. Y. Koide, Dept. of Microbiology and Immunology, Hamamatsu University, School of Medicine, Hamamatsu 431-3192 Japan Japanese Journal of Pharmacology ( JPN. J. PHARMACOL. ) (Japan) 83/3 (167-174) CODEN: JJPAA ISSN: 0021-5198 DOCUMENT TYPE: Journal; Review LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH NUMBER OF REFERENCES: 32 vaccination or genetic immunization is a rapidly developing technology that offers new approaches for the prevention and therapy of disease. Regarding the inoculation method of DNA... DRUG DESCRIPTORS: ...endogenous compound--ec; gamma interferon--endogenous compound--ec; reactive oxygen metabolite--endogenous compound--ec; virus nucleoprotein --drug therapy--dt; virus nucleoprotein--intramuscular drug administration --im; hepatitis B surface antigen--drug therapy--dt; hepatitis surface antigen--intramuscular drug administration--im; glycoprotein gp 160 --drug therapy--dt; protozoal protein--endogenous compound--ec; bacterial protein--drug therapy--dt MEDICAL DESCRIPTORS: ...response; cytotoxic T lymphocyte; immunization; Escherichia coli; leukocyte activation; Influenza virus A; virus infection--drug therapy--dt; virus infection--prevention--pc; virus infection--etiology--et; Hepatitis B virus; histocompatibility complex; Listeria monocytogenes; bacterial infection--drug therapy--dt; bacterial infection--prevention--pc; bacterial infection--etiology--et; tuberculosis--drug therapy--dt; tuberculosis --prevention--pc... ...falciparum--prevention--pc; malaria falciparum--etiology--et; melanoma --drug therapy--dt; melanoma--prevention--pc; B cell lymphoma--drug therapy --dt; B cell lymphoma--prevention--pc; review 17/3,K/9 (Item 6 from file: 73) DIALOG(R) File 73: EMBASE (c) 2005 Elsevier Science B.V. All rts. reserv. 07625937 EMBASE No: 1999112352

# Enhancing the immunogenicity of exogenous hepatitis B surface antigen-based vaccines for MHC-I-Restricted T cells .

Schirmbeck R.; Reimann J.

R. Schirmbeck, Institute for Medical Microbiology, University of Ulm,

Albert Einstein Allee 11, D-89069 Ulm Germany

Biological Chemistry ( BIOL. CHEM. ) (Germany) 1999, 380/3 (285-291)

CODEN: BICHF ISSN: 1431-6730 DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 88

# Enhancing the immunogenicity of exogenous hepatitis B surface antigen-based vaccines for MHC-I-Restricted T cells

Vaccination with either exogenous **hepatitis** B surface antigen (HBsAg) lipoprotein particles without adjuvants, or plasmid DNA encoding secreted small HBsAg stimulate long-lasting, potent antibody responses in H-2(d) (BALB...

...with exogenous HBsAg primes MHC-I restricted cytotoxic T lymphocyte (CTL) responses to HBsAg in H-2(d) but not H-2sup b mice, while **DNA** vaccination primes HBsAg-specific CTL responses in both mouse strains. We defined vaccination strategies that could elicit CTL responses to exogenous HBsAg in 'low responder' C57BI...
DRUG DESCRIPTORS:

## \* hepatitis b surface antigen; \* hepatitis b vaccine MEDICAL DESCRIPTORS:

immunogenicity; major histocompatibility complex restriction; t lymphocyte; vaccination; cytotoxic t lymphocyte; review ; priority journal

#### 17/3,K/10 (Item 7 from file: 73)

DIALOG(R) File 73: EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

07621290 EMBASE No: 1999093571

### DNA vaccines: A ray of hope

Tuteja R.

R. Tuteja, Immunology Group, ICGEB, Aruna Asaf Ali Marg, New Delhi - 110

067 India

AUTHOR EMAIL: renu@icgeb.res.in

Critical Reviews in Biochemistry and Molecular Biology ( CRIT. REV.

BIOCHEM. MOL. BIOL. ) (United States) 1999, 34/1 (1-24)

CODEN: CRBBE ISSN: 1040-9238 DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 103

Vaccines represent the most commonly employed immunologic intervention in medicine today. **DNA** vaccination or genetic immunization is a rapidly developing technology that offers new approaches for the prevention of disease. This method of vaccination provides a stable and... DRUG DESCRIPTORS:

\*DNA vaccine--drug administration--ad; \*DNA vaccine--drug therapy--dt; \*DNA vaccine--pharmaceutics--pr; \*DNA vaccine--pharmacology--pd; \*plasmid DNA; \* hepatitis b vaccine--drug administration--ad; \* hepatitis b vaccine

--drug therapy--dt; \* hepatitis b vaccine--pharmaceutics--pr; \*

hepatitis b vaccine--pharmacology--pd; \*human immunodeficiency virus vaccine--drug dose--do; \*human immunodeficiency virus vaccine--drug therapy --dt; \*human immunodeficiency virus vaccine--pharmaceutics--pr; \*human

```
immunodeficiency...
MEDICAL DESCRIPTORS:
```

hepatitis b --drug therapy--dt; hepatitis c--drug therapy--dt; influenza
--drug therapy--dt; rabies--drug therapy--dt; virus myocarditis--drug
therapy--dt; acquired immune deficiency syndrome...

...lymphocyte; immunization; malaria; gene gun; drug mechanism; human; nonhuman; mouse; subcutaneous drug administration; intramuscular drug administration; intravenous drug administration; intradermal drug administration; review ; priority journal

# 17/3,K/11 (Item 8 from file: 73) DIALOG(R)File 73:EMBASE (c) 2005 Elsevier Science B.V. All rts. reserv.

07528290 EMBASE No: 1998413577

### Modulating the immune response to genetic immunization

Cohen A.D.; Boyer J.D.; Weiner D.B.

D.B. Weiner, 505 Stellar-Chance Bldg., Department of Pathology, Univ. of PA School of Medicine, 422 Curie Blvd., Philadelphia, PA 19104 United States

AUTHOR EMAIL: dbweiner@mail.med.upenn.edu

FASEB Journal ( FASEB J. ) (United States) 1998, 12/15 (1611-1626)

CODEN: FAJOE ISSN: 0892-6638 DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 110

...therapeutic agents. Although the mechanisms of immunity to DNA have not yet been fully elucidated, it has become apparent that the immune response achieved by **DNA** vaccination is quite malleable, and can be manipulated by altering the conditions under which the vaccine is administered. Either through changing the method or location of... MEDICAL DESCRIPTORS:

...dt; human immunodeficiency virus infection--prevention--pc; herpes virus infection--drug therapy--dt; herpes virus infection--prevention--pc; influenza--drug therapy--dt; influenza--prevention--pc; hepatitis b --drug therapy--dt; hepatitis b --prevention--pc; malaria--drug therapy--dt; malaria--prevention--pc; colon cancer--drug therapy--dt; colon cancer--prevention--pc; t cell lymphoma--drug therapy--dt; t cell lymphoma --prevention--pc; antigen presenting cell; CpG island; natural killer cell; helper cell; cytotoxic t lymphocyte; human; nonhuman; clinical trial; review ; priority journal

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S3
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                RD (unique items)
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S4
            9
S5
         3234
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56
          351
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             LELESS (W) INJECTION))
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S13
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S14
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                RD (unique items)
S15
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S16
           15
                S15 AND REVIEW
           11
S17
                RD (unique items)
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S S18 AND REVIEW
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     S19
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          165214 VACCINATION
             382 GENETIC (W) VACCINATION
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T S20/3, K/ALL
  20/3,K/1
               (Item 1 from file: 73)
DIALOG(R) File 73: EMBASE
(c) 2005 Elsevier Science B.V. All rts. reserv.
10932192
             EMBASE No: 1998345292
 DNA/ Genetic vaccination
  Kucerova L.
  L. Kucerova, Department of Molecular Virology, Cancer Research Institute,
  Slovak Academy of Sciences, Vlarska 7, 833 91 Bratislava Slovakia
  Viral Immunology (VIRAL IMMUNOL.) (United States) 1998, 11/2 (55-63)
  CODEN: VIIME
               ISSN: 0882-8245
  DOCUMENT TYPE: Journal; Review
  LANGUAGE: ENGLISH
                    SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 52
 DNA/ Genetic
                 vaccination
DRUG DESCRIPTORS:
cancer vaccine--pharmacology--pd; human immunodeficiency virus vaccine
--pharmacology--pd; hepatitis b vaccine --pharmacology--pd; bacterial
vaccine--pharmacology--pd
MEDICAL DESCRIPTORS:
cellular immunity; immune response; antigen expression; dna transfection;
humoral immunity; immunity; antigen presentation; human; nonhuman; animal
experiment; human cell; animal cell; review
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        Items
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S1
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                (MINIMAL OR ENHANCERLESS) (W) PROMOTER?
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s2
          39
               S1 AND (HCMV OR SCMV OR PRV)
S3
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               RD (unique items)
S4
           9
               S3 NOT PY>1998
S5
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               (GENETIC OR DNA) (W) VACCINATION
S6
         351
               S5 AND ((GENE (W) GUN) OR (PARTICLE (W) MEDIATED) OR (NEED-
            LELESS (W) INJECTION))
s7
          68 S6 AND ((HEPATITIS (W) B) OR HIV)
S8
           5
               S7 AND (CMV)
               RD (unique items)
S9
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S10
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S11
          13
               S7 NOT PY>1998
S12
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               RD (unique items)
          5
S13
               S7 AND (CMV)
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        187
               S5 AND (HEPATITIS (W) B)
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          11
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          $16.59 1.561 DialUnits File73
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          $26.46 9 Types
   $43.05 Estimated cost File73
           OneSearch, 4 files, 5.770 DialUnits FileOS
    $4.80 INTERNET
   $76.03 Estimated cost this search
   $81.32 Estimated total session cost 6.751 DialUnits
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### Return to logon page!